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THE DRAGON AND THE ELEPHANT

Learning from Agricultural and Rural Reforms in China and India

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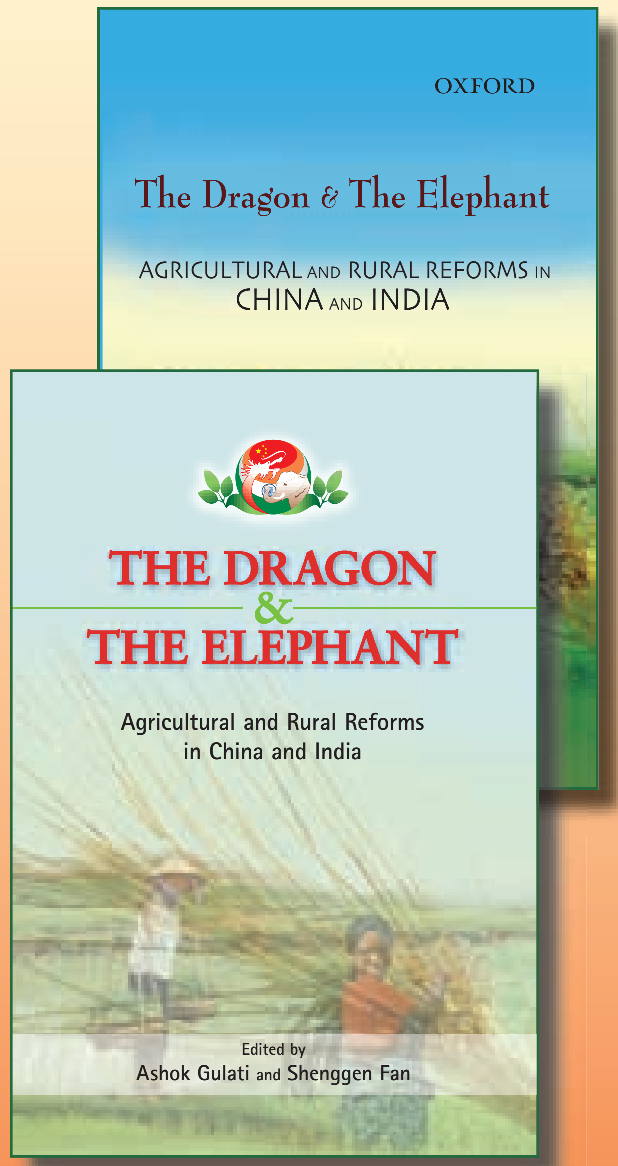
During the past two-and-a-half decades, China and India have implemented a series of economic reforms that have led to recent growth rates of 9–11 percent per year in China and 8–9 percent per year in India. The rapid economic growth of the two countries has not only captured the attention of the world but has also set into motion a rethinking of the very paradigm of economic development because, despite similar trends in growth rates, the two countries have taken different reform paths, which have led to different rates of poverty reduction. Thus far, agriculture-led growth in China has reduced poverty much faster than has India's experience of liberalizing and reforming the



manufacturing sector. With public investments in rural roads and agricultural research and development (R&D) playing critical roles, China has been able to not only feed its population but also raise rural incomes despite having much smaller average landholding size than in India. Nonetheless, there are also lessons to be learned from India's experience. This brief is based on a book, *The Dragon and the Elephant: Agricultural and Rural Reforms in China and India* (published for IFPRI by Johns Hopkins University Press and, in South Asia, by Oxford University Press-India), which compares the rural development and agricultural reform experiences of China and India and examines the lessons that can be learned from both.

INITIAL CONDITIONS MATTER

One such lesson is that the initial conditions existing in China and India significantly influenced the impact of the reforms undertaken in each country. In 1970, the likelihood of an Indian child dying before the age of 5 was twice that of her Chinese counterpart. Life expectancy was 49 years in India and 62 years in China, and 70 percent of the Indian rural population was illiterate as opposed to 49 percent of rural Chinese. China's edge in health and education can be explained by a government policy of providing basic amenities for free; by rural electrification, which had made headway in the pre-reform years; and by the land distribution and tenure system, which ensured egalitarian access to land. The resultant improvements in efficiency and productivity were major triggers in poverty reduction.

In India, on the other hand, land reforms were not as successful and left a relatively larger number of landless agricultural laborers exposed to unemployment and underemployment. Although public investments in the power sector were substantial, rural electrification and even the establishment of telecommunications connections proceeded very slowly, severely affecting the growth of agroprocessing and cold storage in the rural nonfarm sector.

STEPPING UP PUBLIC INVESTMENTS

The correlation between initial conditions and post-reform achievements in poverty reduction and growth in China makes a convincing case for stepping up government investments in rural infrastructure and social services. In India, the decline in rural public investment as a result of fiscal profligacy and rising subsidies on fertilizers, power, water, and price support is regarded as one of the primary causes of slower growth after 1997, although most South Asian and Southeast Asian economies grew more slowly in the 1997–2001 period due to financial crisis.

If raising public investments significantly in the short run is not feasible for the two countries, they will have to target available resources more efficiently in order to generate high returns from existing investments. IFPRI studies have found that spending on agricultural research, education, and rural roads is more effective in promoting agricultural growth and poverty reduction than spending on fertilizer or irrigation subsidies, for example. In fact, investments yield 10 times more marginal returns than subsidies. This has major policy implications for India, where agricultural input subsidies are still rising unabated. In 2008, fertilizer subsidies alone are likely to total $25 billion, while agricultural investment will hover around $5 billion. There are also significant opportunities for public–private partnerships in agriculture in the areas of funding, research, and extension.

Encouraging the more efficient use of water resources by targeting investments, reforming existing water systems, and improving crop yields is particularly crucial. Studies have shown that investments in rainfed areas have had high marginal returns for agricultural growth and poverty reduction. In both China and India, water-use efficiency can be vastly improved through institutional and management reforms of existing water systems. India's experience with water users' associations in some states, participatory watershed schemes, and community-based rain harvesting can provide useful lessons, while China's experience shows that providing incentives to irrigation systems managers to improve use efficiency has a positive effect on crop yields, groundwater tables, and cereal production. Improving crop yields can also lead to a more efficient use of scarce water resources in agriculture, though inputs other than water—such as credit and agricultural research on watersaving and yield-improving technologies—will need to be deployed. Trade and price policies favorable to high-value, less water-intensive crops may also be required.

PROVIDING MARKET AND TRADE INCENTIVES

China's experience with marketing reforms holds valuable lessons for other transition economies. Farm-support policies lose their rationale when there is an oversupply of food and agricultural trade is free and open. In India, minimum support prices and input subsidies that were intended to encourage the adoption of new technologies and fuel growth turned into inefficient and costly income-support interventions because they were not abolished after their aim was realized. China could learn from this experience and seek to encourage agricultural growth in the future, yet avoid the large inefficient Indian subsidies.

In India, a host of outdated domestic regulations, restrictive land laws, and license requirements also continue to weaken the environment for agribusiness and private-sector involvement in agricultural marketing that could boost employment and efficiency. Legal and regulatory reforms remain critical against a backdrop of increasing, diversified food demand and the opening up of agricultural trade. In this regard, India can learn from China, which has opened up its land-lease market, allowing peasants to lease their land to anyone for 30 years. China and India should also put in place well-targeted and innovative cost-effective crop-insurance policies to protect farmers from drastic supply and price shocks, which can only intensify as trade policies are further liberalized. In India, the abolition of restrictions to trading on the futures markets in major agricultural commodities is a step in this direction and needs to be further strengthened. However, in 2008, this policy regressed slightly, as some agricultural commodities were suspended from futures trading. It may be good for India to examine China's experiences in opening futures markets during the 1993–97 period, especially since China's commodity exchanges are now performing a very useful role in terms of price discovery.

With regard to broad trade liberalization, both countries made progress in reducing protection levels. Still, India's weighted average tariff of 29 percent in the early 2000s was double that of China's 16 percent. India was able to sustain its current growth rate with lower foreign direct investment (FDI) inflows and relatively less export orientation than China. But if it wants to achieve 9 percent GDP growth on a sustainable basis, it needs to further reform the FDI climate in view of its potential to transfer know-how, managerial skills, and new technologies. China can offer valuable lessons in this area.

PROMOTING RURAL DIVERSIFICATION AND VERTICAL INTEGRATION

Diversification of crops and income reduces risk and provides the rural poor with alternative pathways out of poverty. In China, the achievement of food self-sufficiency and the extraordinary growth in basic grain production by the late 1970s immensely helped diversification toward nonfoodgrain products like livestock, fish, and fruits and vegetables. In India, on the other hand, steadily growing minimum support prices artificially raised the production of major cereals and discouraged diversification. Post reform, rising per capita incomes and changing food consumption patterns have been major drivers for diversification into nonfoodcrops.

However, without vertical coordination between production, processing, and marketing, the potential for growth inherent in the diversification process may remain underexploited. Vertical coordination reduces risks by providing assured markets, cutting transaction costs, and helping to improve quality standards and food safety. India's successful experiments with contract farming can be valuable for China, while India can learn from China's experience of retail food chains and supermarket growth in recent years.

However, strengthening vertical coordination without tackling the other major obstacles that small farmers face—such as lack of access to markets, technology, and information; poor rural infrastructure; and inadequate marketing facilities—will not be effective in reducing poverty. Future reforms need to address these issues, and well-targeted government-support services—designed specifically for smallholders—are needed for credit markets, extension services, and the modernization of wholesale markets.

The evolution of a dynamic rural nonfarm (RNF) sector offers great potential for rural diversification; in fact, the rapid growth of rural enterprises in China is one of the most striking differentiators between the reform processes of the two countries. Therefore, spending on rural education will also be crucial, since a poorly educated rural labor force limits the growth of RNF job opportunities, a challenge that will increasingly confront both countries as greater market and trade liberalization leads to the creation of new and more productive occupations requiring more educated laborers.

TARGETING ANTI-POVERTY PROGRAMS AND SAFETY NETS

Compared to land reforms, which are relatively impractical in India due to their current potential for social conflict, and public investments, which take a long time to translate into employment and economic growth, antipoverty programs (APPs) and safety nets are more agile in the short run. Though they face challenges in terms of targeting, implementation, and cost-effectiveness, their significant contribution to limiting the severity and the extent of poverty is inescapable.

China, which has relied upon traditional, broad income- or area-based approaches, can learn from India's experience in targeting rural public works and programs to specific sections of the poor, such as women, children, and the elderly. To strengthen the impact of APPs, decentralized and participatory approaches are more effective than top-down strategies. India is a good point of reference in this respect since extensive participation of *panchayats* and civil society at various stages of the formulation and implementation of the programs ensures the tailoring of programs to local needs, thereby improving their impact and effectiveness.

IMPROVING INSTITUTIONS AND GOVERNANCE

In both India and China, the outcomes of the reforms were shaped by the different patterns of governance. India is a "debating society" where political differences are expressed freely. Policymaking can be influenced by various interest groups and decisions are made only after long debate. This process is compatible with the needs of a democratic and dynamic polity, but it could also slow the pace of India's economic reforms. China, on the other hand, is a "mobilizing society," where decisions are made more quickly and state power is backed by mass mobilization. However, the lack of more elaborate debate in China on major reforms can sometimes lead to disastrous actions, as with the Great Leap Forward in 1958 and the Cultural Revolution of 1966–76. As China's economic system continues to open up and prosperity increases, it will become harder and harder to reconcile the centralized political setup with the more liberal economic system. Indeed, this is one of the most important challenges facing China today.

Another critical factor explaining dissimilar reform outcomes between India and China is the level of reform implementation that is shaped by the institutional, regulatory, and political settings. Strengthening public institutions that provide public goods and services and making them cost-efficient can lead to both fiscal sustainability and long-term growth. Although streamlining the regulatory apparatus through delicensing has begun, much inefficiency remains in place.

FUTURE REFORMS

Despite their successes in achieving remarkable development and growth, both countries still face significant challenges on the path to further prosperity. Future growth must be based on higher efficiency and will require China and India to invest in science and new technologies to harness energy and water, optimize their economic structures for allocative efficiency, and reform their fiscal, financial, banking, and insurance systems. It will also depend upon:

- *Structural transformation of the agricultural and rural sectors.* Within the rural sector, rural nonfarm and rural–urban migration need to be promoted. Within the agricultural sector, policy reforms are needed to increase value-added production beyond traditional foodgrains. Agriculture needs to be placed in the context of an agrisystem that encompasses farming, wholesaling, processing, and retailing.
- *Setting the right priorities for public spending.* Both countries need to rationalize their spending by investing more in rural infrastructure, agricultural research, and rural education. Input and output subsidies should be more targeted to smallholders or to poor regions. Social protection should also be phased in sooner, but better targeting and efficient management are needed to increase effectiveness.
- *Improving governance related to agricultural and rural development.* Different levels of government administration must be accountable for their work, and local participation and local governance reforms should be implemented to place checks on the administration system.
- *Informing the political and policymaking processes of the various evidence-based policy options.* Policymaking in both countries should be based on evidence, be transparent, and include the participation of a broad range of stakeholders.

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